

MODEL Nº 99

OWNER'S MANUAL

*Grain
Maker*





THERE WAS A TIME

There was a time when time wasn't such a bother. When right and wrong were distinguishable. When we did things the right way not because it was trendy or artisanal or in vogue. But because it was the right way. We needed no reason other than that. It was the right way. And the right way made food taste better. Made machines run smoother. Made buildings stand stronger. Made clothing more durable. And made people more accountable. The right way.

It took a little more time perhaps. It took more effort. It might have even demanded a bit of backbone. But it was the right way, and so it was right.

Then the world decided to cut corners. To make it faster. To make it cheaper. To sacrifice quality and character and virtue for speed. For efficiency. For a price. Suddenly, a loaf of bread could last a month while a car couldn't. Suddenly, marriages lasted a year while grudges persisted forever. Pens, razors, relationships, everything became disposable. Nothing lasted anymore. And to us, that was not the right way. And never would be.

So we started GrainMaker. It was our way of saying, enough. Our way of declaring war on corner cutters and efficiency experts

and all those consultants who brought us faster, cheaper, tasteless products. It was our little contribution to stopping the madness. But more than that. It was the right way to do it.

It was the right way to build a machine. To make bread. To craft foods in a way that was better for our hearts. And better for our souls. It was our way of getting back in touch with the earth. Of getting the most out of what we've been given. Of realizing that fulfillment is a greater virtue than fast. Of understanding that life goes by so quickly that it makes more sense to slow things down than to rush them along. That's the right way.

And we make GrainMaker in the right place. In America. But not just in America. In Montana. That part of America that has no use for anything dainty or darling or fragile. In Montana. Where strength of character meets strength of purpose, and where there's precious little time for anything too precious. And that's why we do what we do the way we do it. And when you do things the right way, you don't look to change. You look to change those who don't.

**GRAINMAKER.
WE'LL NEVER CHANGE.**

INTRODUCTION

Your heirloom quality GrainMaker mill comes complete with everything you need to start grinding—all you need to add is quality grain, seeds, legumes or nuts. Your mill can produce cracked grains to fine flour and creamy nut butter in just one pass.

Each mill has been tested before it leaves our shop. You may notice some

residual flour in the mill from this testing. Your GrainMaker mill was manufactured in a facility that contains wheat and nuts.

This mill is intended for use with dry or oily grains, seeds, legumes, nuts and similar food items. Your GrainMaker is not intended for use with anything moist or wet.



SET-UP

With just a few simple steps, you will be on your way to grinding your own wholesome ingredients!

1. Attach the extension handle to the V-pulley flywheel using the provided bolts and large Allen wrench, placing the bolt furthest away from the wood grip into the shaft, and the second bolt into the tapped spoke of the V-pulley flywheel.

2. Secure the mill to your work surface by bolting or using the optional GrainMaker clamp. The mill must be secured.

3. The Click & Lock Knob is adjustable. The more you loosen it, the more space will be allowed between the grinding burrs and results in a coarser grind. The more you tighten it; the less space will be allowed between the grinding burrs and results in a finer grind. You will need to loosen the knob so the pulley turns freely with no resistance when rotated.

Note: When you loosen the knob, position the extension handle and grip to its lowest point. If you fail to do this, the handle and grip will lose resistance and rotate quickly towards the base of the mill. This could harm your fingers or hands.

4. Your GrainMaker has two auger options. The spring-like coil auger allows for more ease of use when grinding small grains like wheat, barley and rice. You may also use it for popcorn. Be sure to insert the coil auger with the closed end in first. The GrainBreaker auger is for grinding corn, legumes, coffee beans, dehydrated foods

and nuts. The design and function is to break larger media before it reaches the burrs. It is necessary to use the GrainBreaker auger on all large grains.

5. Determine which Auger to use. The mill is shipped with the coil auger already inserted. To change augers, simply hold the burrs together with one hand while turning the Click & Lock Knob counter-clockwise with the other hand until it is completely unscrewed. Then, remove the front burr. Pull the auger out, use the provided cleaning brush to sweep inside the tube to be sure no media is in the way and insert the other auger. (Keep the spare auger on the storage post with the provided clip.) Then, place your front burr on and tighten the knob until you hear a clicking sound.

6. Place the hopper safety guard in the hopper. Fill the hopper and begin grinding making sure you are turning clockwise. As the grain works into the burrs, tighten the adjustment knob by 1 to 2 clicks, turn a couple of times, test consistency and continue this process until you reach the desired consistency. Remember, small adjustments make changes, but it is necessary to turn the pulley a couple of times to allow the change to be noticed. Over tightening will not allow the media to flow.

NOTE: WHEN GRINDING GRAIN INTO FLOUR, IT IS NORMAL TO HAVE MORE FLOUR ACCUMULATING IN YOUR CONTAINER ON ONE SIDE VERSES THE OTHER.

CLEANING

It is normal to find residual grain left in the mill under the auger area. This is simply because if the auger went all the way to the sides of the tube, the handle would not be able to rotate, nor would the grain be able to be pushed through. When you are finished grinding, remove the bowl with your ground flour, place an empty bowl under the burrs and remove the dust cover, adjustment knob, front burr and auger. Use the long cleaning brush provided and sweep out all residual grain. You may discard, or simply place in your mill or container to be used for your next grind.

To disassemble: Hold the two burrs together with one hand. Turn the Click & Lock Knob counter-clockwise with the other hand until it is completely unscrewed. Remove the dust cover and front burr. To remove the stationary burr, turn clockwise and remove.

CLEANING SCHEDULE

It is important to clean and maintain your mill according to the schedule below.

Depending on how often you use your mill, it is important to follow this monthly cleaning schedule.

RECOMMENDED CLEANING SCHEDULE:

- **Average Use (10 cups a month):**
Once a month

- **Extra Use (30-50 cups a month):**
Once a week

HINT: For a thorough cleaning after grinding oily materials, place a clean container under the burrs and run dry grain through the mill to absorb some of the oily residue, then disassemble and clean. You may wash the burrs by hand in soapy water, but you must dry immediately. If you do notice any rust on your burrs, simply run some wheat or dry grain through the mill and discard the flour.

HINT: If you live in a humid area, you may wish to apply some olive oil to your burrs and feeding tube between uses.

IMPORTANT! DO NOT IMMERSE THE GRAINMAKER MILL IN WATER. THIS WILL DAMAGE THE BEARINGS.

TO CLEAN: Remove dust cover, Click & Lock Knob, and front and stationary burrs.

If you are unable to remove the back stationary grinding burr, this is due to flour gathering in the slot on the back of the grinding burr where it attaches to the flange. Use a rubber mallet and tap on the front side of the stationary burr to loosen the packed flour. If it is still stuck, using a rubber mallet, tap on the top of the stationary burr in a downward motion in the direction needed to loosen the stationary burr.

HELPFUL TIPS

When grinding larger nuts and legumes, break them into smaller pieces to allow them to fall more easily into the auger. Nuts must be at room temperature, but lightly toasting nuts and legumes in a warm oven will make the process easier. When grinding nut butters, remove the dust cover. Use a spatula to remove the nut butter that gathers around the edges of the burrs.

If the consistency of your grind is not to your liking, then place the milled product back into the hopper and process again.

If the grinding burrs are hot, you may have the knob too tight. This is common especially when using your own motor and running it too fast. The motor needs to run under 100 RPM.

If you notice your Dust Cover – the U shaped cover over the grinding burrs – is not aligned, this happens when the handle is turned the wrong way. It may be corrected by making sure the bolts on the flange are tightened properly and turning the handle in the correct direction.

It is not necessary to remove the stationary burr when changing out the augers. Please be sure to remove all grain using the provided brush before inserting auger to avoid trapping grain behind the auger.

If you notice the mill is binding up when grinding soft grains like Spelt or Oats, this is because the mill is turning too fast.

Over-tightening the grinding burrs will not allow media to flow.

FINE PRINT

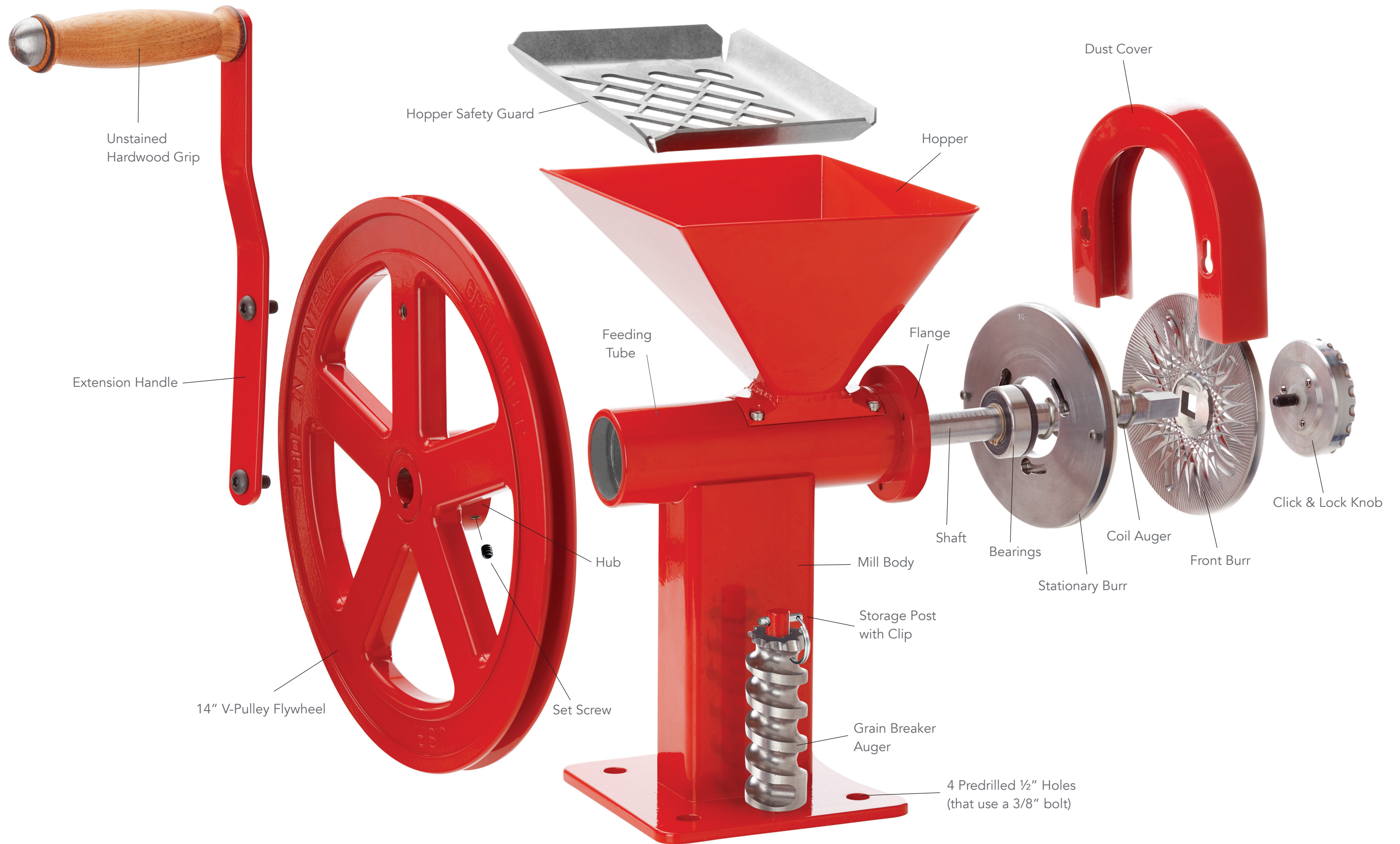
GrainMaker mills and accessories are not toys. Adult supervision is required. The GrainMaker must be bolted or clamped securely to a work surface before using, and the hopper safety guard must be in place.

NOTE: Our shiny red mills and finely crafted accessories are practically irresistible to children. Get in the habit of leaving the handle in the upright position, so children aren't tempted to reach for it, and please, supervise children around the mill at all times.

Consumer assumes all risk and responsibility when operating a GrainMaker mill by hand, bicycle or electric power.

As the designer and manufacturer, we reserve the right to make changes that improve our products. Models and prices subject to change.





USING WHOLE GRAINS

The quality of the product you make is never any better than the raw materials you start with. Always buy the highest quality grains and seeds that you can afford. For best results, use grains with low moisture and high protein content.

WHEAT: There are six classes and about 30,000 varieties of wheat. They include: Hard Red Winter, Hard Red Spring, Soft Red Winter, Soft White, Hard White, and Durum. (White Wheat does not make white flour as purchased in stores.) We recommend using food grade, Non-GMO and chemical free wheat.

PRAIRIE GOLD: This is a Hard White wheat. It contains 15-17% protein and 9.5-10% moisture content.

BRONZE CHIEF: This is a Hard Red Spring wheat. It contains 15-17% protein and 9.5-10% moisture content.

SPELT: This is an ancient grain that is a cousin to wheat and has been cultivated since approximately 5000 BC. It has a mild, nutty flavor, and is a popular alternative to wheat. It provides several nutrients such as iron, magnesium, and zinc.

OAT GROATS: One of the most nutritious grains and a good source of the soluble fiber beta glucan, which helps decrease cholesterol in the blood. Oats may contain gluten and there is some debate in this area. Oat flour helps bread to rise properly.

KAMUT KHORASAN: An ancient heritage grain with a buttery rich, nutty flavor. It is higher in protein, essential lipids and amino acids and lower in gluten. It is sometimes called "Egyptian Wheat".

RYE: It contains gluten, but it is much lower than that of wheat. It is an excellent source of dietary fiber as well as vitamin E, calcium, iron, thiamin, phosphorus and potassium. Rye breads are usually made with at least half wheat flour.

BARLEY, BUCKWHEAT, QUINOA AND MILLET: These are other grains you may consider grinding and adding to your recipes. Buckwheat and Millet do not contain gluten.

FLAXSEED: It is one of the best sources of omega-3 fatty acids, which is beneficial in reducing cholesterol and lowering the risk of stroke and heart disease. About one-third of the fiber in flaxseed is soluble and two-thirds is insoluble, which is an important component in aiding digestion. Flaxseed is one of the best sources of lignin, which may play a role in fighting certain types of cancer.

NUTS: Making fresh nut butters with your mill is easy. Use fresh, salted or unsalted nuts like peanuts, cashews or almonds. Lightly toast them in a warm oven before putting them in the hopper. This helps soften the natural oils in the nuts which allows you to produce nut butters faster and with more ease. Be sure to use your GrainBreaker auger.



CORN: A good source of vitamin A, manganese and potassium. Popcorn makes "the best cornmeal/flour" according to many folks because it is very dry and hard. You can use either auger when grinding popcorn.

BEANS: Bean flour makes a great gluten-free substitute. Adding bean flour to wheat flour helps to aid in digestion. Beans should be started slowly, working up to a 4/1 ratio. Be sure to use the GrainBreaker auger.

RICE: There are more than 40,000 varieties of rice. Rice flour is also used as a thickening agent in recipes that are refrigerated or frozen since it inhibits liquid separation.

COFFEE: Using the GrainBreaker auger, you can make any type of grind for the way you like to brew coffee.

These are just some of the many items being ground in the GrainMaker mill. You may choose to grind dehydrated tomatoes, potatoes and other vegetables. We would love to hear about what you are grinding!

HINT: Whole grain breads are more likely to turn out well when making a "sponge". Using cooked oatmeal or cottage cheese makes bread very moist. Adding dough enhancer will give added shelf life because it is a natural preservative, it helps the bread rise, improves the texture and can make a fluffier, lighter bread. Water for dissolving yeast should not exceed 125 degrees. It is very important not to over knead whole grain bread. When whole grain breads rise, they should double in size. If they rise too long, they will collapse in baking.

BONNIE'S RECIPES

EZEKIEL BREAD

This recipe is based on Ezekiel 4:9 using four grains and four legumes. This bread is nutritionally complete, containing all eight essential amino acids.

- 2 1/2 Cups Hard Wheat
- 1 1/2 Cups Spelt
- 1/2 Cup Barley – can use Pearl Barley
- 1/4 Cup Millet
- 1/4 Cup Lentils
- 2 Tbsp. Great Northern Beans
- 2 Tbsp. Red Kidney Beans
- 2 Tbsp. Pinto Beans

Mix all grains and beans in a large bowl, and use your mill to grind into a fine flour. Set aside.

- 4 Cups Warm Water
- 1 Cup Honey (Molasses or Stevia Brown Sugar can also be used; add extra water if using dry sweetener)
- 1/2 Cup Oil – Coconut, Peanut, Corn or Olive
- 2 Tbsp. Dry Yeast

Measure into a large bowl, mix and set aside for 5 minutes to proof:

Add 2-3 tsp. salt to the flour mixture, then add dry ingredients to the liquids. Mix with a strong wooden spoon until stretchy and elastic – about 7 minutes.

This is a batter bread that will not form a smooth ball. Pour equal amounts into three oiled bread pans. Place pans in oven on lowest heat (170 degrees) and let rise to within 1/2” of tops of pans or it will overflow. This will take approximately 15-20 minutes.

Once risen, (without opening the oven door) turn the heat up to 350 degrees, and bake for 25-30 minutes until browned on top. Remember, this is a cake-like batter bread, not like regular yeast breads.

You may have to experiment with cooking times.

Enjoy!



DILLY BREAD

- 1/8 Heaping Cup Active Dry Yeast
- 4 Cups Warm Water
- 1/4 Cup Sugar
- Approximately 2 lbs. 5 oz. Milled Flour
- 1 Onion, Chopped
- 8 Tbsp. Oil, Divided
- 1 Large Bunch Dill, Chopped Fine
- 4 Eggs
- 1 1/3 Cup Cottage Cheese
- 8 Tsp. Salt
- Milk for Glazing

Mix yeast, water and sugar together in large bowl and let stand for 15 minutes to dissolve. Stir in about half the flour, cover and let rise in a warm place for 45 minutes.

Meanwhile, in a frying pan, cook the onion in 1 Tbsp. of oil until transparent, and set aside to cool. Stir the dill, eggs, cottage cheese, salt and remaining oil into the yeast mixture. Gradually add the remaining flour until too stiff to stir. Transfer dough to a floured surface, and knead until smooth and elastic. Place in a bowl, cover, and let rise until doubled in volume, approximately 1-1.5 hours. Divide the dough in half, and shape into rounds on a large greased baking sheet. Let rise in a warm place for 30 minutes. Preheat oven to 375 degrees. Score the top of the loaves, brush with milk and bake until browned, 30-45 minutes. Set on rack to cool.

Enjoy!



AVAILABLE ACCESSORIES



ELECTRIC GEAR MOTOR USA made gear motor made exclusively for GrainMaker mills. Easy conversion with no belts needed, simply remove the flywheel and slide the motor directly on the shaft.



BICYCLE KIT Want to make flour faster, without electricity? Use Pedal Power! Our Bicycle Conversion Kit and your geared bicycle with 26" wheels is the answer.



DIY MOTORIZING KIT Designed for consumers with basic knowledge of mechanics and carpentry. It allows you to convert your own 1725 RPM motor to a safe grinding speed of under 100 RPMs. The motor requires a minimum of 150 inch pounds of torque.



CUSTOM MOUNTING CLAMP This custom machined heavy-duty clamp needs 1" clearance with a thickness of up to 3". This clamp is not ideal for those with rounded or waterfall edge counters.



EXTENDED WOOD GRIP This grip is designed for customers that choose to use two hands while turning the hand crank on the flywheel. It is 10.5" wide compared to the 5" grip that comes standard with all of our mills.

Our accessories are designed and manufactured with the same attention to detail and craftsmanship as your hand-made mill. Photos shown without safety guarding for illustration purposes only.

HEIRLOOM GUARANTEE

Wild West Machine LLC. guarantees this GrainMaker mill to be free from defects in materials and workmanship under normal household use and conditions for a lifetime. This Lifetime Heirloom Guarantee covers all parts including the burrs and excluding the finish. This Heirloom Guarantee is void if the mill is used commercially, or in any way other than recommended.

Wild West Machine LLC. will repair, or at its discretion, replace the mill or mill parts free of charge (less shipping), if in the opinion of the company it has been proven that the problem is related to defective parts or an error in workmanship.

MONEY-BACK GUARANTEE: Your mill comes with a 30-day money-back guarantee. Contact Wild West Machine LLC. immediately to arrange return and full refund of purchase price (less shipping), if you are not satisfied with your purchase. Mill must be securely packaged and returned in new condition.

REGISTRATION: The Lifetime Heirloom Guarantee registration card must be completed and mailed to Wild West Machine LLC., PO Box 130, Stevensville, MT 59870, within 90 days of receipt of merchandise. This proof of purchase must be on file with the company when requesting guarantee service. If you purchase a mill without a Lifetime Heirloom Guarantee card, please contact Wild West Machine LLC.

SHIPPING DAMAGE: Damage due to shipping should be reported immediately to Wild West Machine LLC. Limitations: The

Lifetime Heirloom Guarantee is void if the product is used for any other purpose than that for which it is designed or intended. The product must not be altered, repaired or serviced by anyone other than Wild West Machine LLC. The product must not have been subject to accident or damage in transit, or while in the owner's possession misused, abused or operated contrary to the instructions contained in the instruction manual. This Lifetime Heirloom Guarantee is valid in all countries. The consumer will pay postage for repairs.

EXPRESSED OR IMPLIED WARRANTIES: Except to the extent prohibited by law, no other warranties whether expressed or implied, including warranty merchantability and fitness for a particular purpose, shall apply to this product. Under no circumstances shall Wild West Machine LLC. be liable for consequential damages sustained in connection with said product. Wild West Machine LLC. neither assumes nor authorizes any representative or other person to assume for it any obligation or liability other than such as is expressly set forth. This Lifetime Heirloom Guarantee covers only the GrainMaker and its specific parts, not the food or other products processed in it.

Heirloom Guarantee No.: _____

Authorized by: _____

Date: _____

Wild West Machine LLC.
PO Box 130
Stevensville, MT 59870
Phone: 406-777-7096
Toll-Free: 1-855-777-7096
GrainMaker.com
sales@grainmaker.com

PROUDLY MADE IN STEVENSVILLE, MONTANA